Alternative23

(1A , 2 B, 3 A, 4B - MAX)

Categ	Actions Selected	Functional Basis for Inclusion	Specification for Action Implementation
	-Convert existing leveed lands to tidal action	habitat	
	-Protect existing shallow habitat from erosion	habitat	
	-Restore tidal action to existing diked wetlands	habitat	
	-Reconstruct levees to include shallow water habitat	habitat	
	-Fill deep water to produce shallow habitat	habitat	
	-Reconstruct river banks and shallow areas	habitat	
	-Restore/preserve channel islands	habitat	
	-Restore natural channel configurations	habitat	
	-Modify construction practices to include riverine elements	habitat	
	-Improve and protect degraded riparian habitats	habitat	
	-Establish new areas of riparian habitat	habitat	
	-Reestablish historic riparian areas	habitat	
	-Modify levee maintenance practices	habitat	
	-Protect existing riparian habitat	habitat	
	-Restore and enhance existing wetlands	habitat	
	-Expand wetland acquisition programs	habitat	
	-Convert agricultural lands to wetlands	habitat	
	-Protect existing wetland habitat	habitat	
	Restoration of Delta Terrestrial Habitat	habitat	
	Integrated Habitat Management Programs	habitat	
	-Relocate levees to widen floodways	habitat	
	-Allow river channels to meander	habitat	

B—004901

Alternative23

(1A , 2 B, 3 A, 4B - MAX)

Categ	Actions Selected	Functional Basis for Inclusion	Specification for Action Implementation
	-Acquire Delta islands as overflow areas	habitat	
	-Restore floodways as habitat corridors	habitat	
	-Remove or reduce nuisance species in key habitats	habitat	
	-Improve regulation of ballast-water releases	habitat	
	-Improve border inspection practices	habitat	
	-Inspect for invasions of nuisance species	habitat	
	-Modify habitat to favor native species	habitat	
	-Improve management of public waterfowl areas	habitat	
	- Implement terrestrial predator control programs	habitat	
	-Increase sources and availability of wildlife forage	habitat	
	Manage flows in upstream habitats	populations	
	Manage temperatures in upstream habitats	populations	
	-Restore and replenish spawning gravels	populations	
	-Restore channel configurations	populations	
	-Restore shoreline habitat conditions	populations	
	-Modify gravel mining practices	provisional	
	-Improve floodway drainage to reduce fish stranding	populations	
	-Modify passage at upstream dams/other barriers	populations	
	-Modify natural barriers to improve passage	populations	
	-Provide instream pulse flows for fish passage	populations	
	-Provide instream flows for fish attraction	populations	
	-Restrict livestock grazing in riparian corridors	habitat	
	-Revegetate degraded riparian habitats	habitat	
	-Protect riparian lands through purchase/easements	habitat	
	-Restore flows to dewatered riparian habitats	habitat	
	-Modify floodways to support wetland habitats	habitat	
	-Reuse agricultural drainage to create wetlands	habitat	
	-Reuse urban wastewater effluent to create wetlands	habitat	
	-Manage groundwater recharge for wetland habitat	habitat	
	-Use real-time monitoring and adaptive management	provisional	
	-Obtain approvals for expanded export capacities	water use	
	-Enlarge export pumping capacities	water use	
	-Acquire water to augment instream flows	water use	
	-Acquire water for refuge habitat use	habitat	
	-Obtain shifts in timing of instream flows	habitat	
	-Modify water law to establish instream rights	habitat	
	-Install barriers to keep fish in Sacramento River	habitat	
	-Operate fish barrier on San Joaquin R. at Merced R. in fall	provisional	
	-Expand hatchery capacities	populations	
	-Construct new hatcheries on the San Joaquin R.	populations	
	-Improve hatchery operations	populations	
	-Reduce hatchery effects on wild fish populations	populations	
	-Implement tagging of hatchery-bred fish	populations	
	-Establish new captive breeding programs	populations	
	-Improve regulation of commercial take	populations	
	-Improve regulation of recreational take	populations	
	-Improve enforcement of harvest regulations	populations	
	-Expand desalination of Southern California supplies	water use	
	-Improve desalination technologies and cost	water use	
	-Educate users about desalination feasibility	water use	
	-Increase use of district-wide conservation practices	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Increase use of on-farm conservation practices	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Increase use of municipal conservation practices	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Increase use of industrial conservation practices	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Implement financial incentive policies	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Educate users about conservation technologies	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Implement conservation-oriented rate structures	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Recharge groundwater with reclaimed water	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Use reclaimed water for agricultural irrigation	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Reclaim saline agricultural drainage water	water use	Implemented in export areas; south of delta, or out-of-watershed

Alternative23

(1A , 2 B, 3 A, 4B - MAX)

Categ	Actions Selected	Functional Basis for Inclusion	Specification for Action Implementation
	-Recycle and treat water for potable reuse	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Use reclaimed water for nonpotable urban uses	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Use reclaimed water for landscape irrigation	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Use reclaimed water for power plant cooling	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Use reclaimed water for industrial processes	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Use reclaimed water to repel salinity intrusion	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Improve reclamation technologies and cost	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Educate public about water reclamation	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Encourage land fallowing during drought periods	water use	
	-Develop incentive programs for land retirement	water use	
	-Purchase lands or easements	water use	
	-Establish incentives for pricing to reduce demand	water use	
	-Educate users about pricing feasibility	water use	
	-Remove legal obstacles to pricing incentive programs	water use	
	-Manage riparian zones to protect water quality	water quality	
	-Manage land uses to protect water quality	water quality	
	-Construct new storage south of Delta	water quality	
	-Enlarge existing on-stream storage reservoirs	water quality	Implemented in export areas; south of delta, or out-of-watershed
	-Modify operations of existing on-stream reservoirs	water quality	Implemented in export areas; south of delta, or out-of-watershed
	-Construct new storage south of Delta	water quality	
	-Enlarge existing off-stream storage reservoirs	water quality	Implemented in export areas; south of delta, or out-of-watershed
	-Modify operations of existing off-stream reservoirs	water quality	Implemented in export areas; south of delta, or out-of-watershed
	-Establish incentives for conjunctive use	provisional	
	-Modify California Water Code to encourage conjunctive use	water use	
	-Establish conjunctive use programs	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Store groundwater south of Delta	water use	
	-Implement techniques to increase groundwater recharge	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Construct conveyance to off-stream storage	provisional	
	-Construct conveyance to groundwater storage	provisional	
	-Modify California Water Code to ease transfers	provisional	
	-Improve procedures for transfer permitting	provisional	
	-Coordinate diversion and conveyance of transfers	provisional	
	-Increase water storage capacities at user locations	water use	Implemented in export areas; south of delta, or out-of-watershed
	-Establish incentives for long-term planning	provisional	
	-Conduct Integrated Resources Planning	provisional	
	-Establish incentives for long-term conservation	provisional	
	-Develop alternate supplies for drought situations	provisional	
	Water Resources Data and Information Management	provisional	
	-Establish long-term guarantees for management	water use	
	-Establish institution to implement guarantees	water use	
	-Coordinate multiagency roles in management	provisional	
	-Coordinate groundwater/surface water management	provisional	
	-Establish incentives for cooperation/coordination	provisional	
	-Establish a public awareness/education program	provisional	
	-Establish procedures for allocation of export capacity	water use	
	-Establish institution to allocate export capacity	water use	
	-Coordinate water transfers and export capacity	water use	
	-Market export capacity for environmental benefits	water use	
	-Coordinate land uses with water supplies	water use	
	-Encourage local determination of supplies available	provisional	
	-Encourage local assessment of water supply reliability	provisional	
	-Implement source control regulations for pollutants	water quality	
	-Implement pollutant-load limits in San Joaquin R.	water quality	
	-Reduce or control volume of agricultural discharges	water quality	
	-Modify cropping and irrigation practices	water quality	
	-Export agricultural drainage to other watersheds	water quality	
	-Retire lands with drainage disposal problems	water quality	
	-Improve pest-control practices	water quality	
	-Avoid use of high-salinity irrigation water	water quality	
	-Manage irrigation tailwater to reduce pesticides	water quality	

B—004903

Alternative23

(1A , 2 B, 3 A, 4B - MAX)

Categ	Actions Selected	Functional Basis for Inclusion	Specification for Action Implementation
	-Implement source control regulations for pollutants	water quality	
	-Implement pollutant-load limits in San Joaquin R.	water quality	
	-Reduce or control volume of agricultural discharges	water quality	
	-Modify cropping and irrigation practices	water quality	
	-Export agricultural drainage to other watersheds	water quality	
	-Retire lands with drainage disposal problems	water quality	
	-Improve pest-control practices	water quality	
	-Avoid use of high-salinity irrigation water	water quality	
	-Manage irrigation tailwater to reduce pesticides	water quality	
	-Treat drainage to remove pollutants	water quality	
	-Retain and manage stormwater runoff	water quality	
	-Implement urban awareness/education programs	water quality	
	-Treat discharges to remove problem constituents	water quality	
	-Construct wetlands to treat wastewater effluent	water quality	
	-Increase key nutrient inputs to estuary	water quality	
	-Enforce wastewater discharge requirements	provisional	
	-Prevent toxic discharges from industrial plants	provisional	
	-Limit dredging to slack tides	water quality	
	-Limit dredging to avoid fish migration periods	water quality	
	-Use techniques to localize sediment movement	water quality	
	-Dispose dredged materials at nonaquatic sites	water quality	
	-Remove contaminated sediments in critical habitat sites	water quality	
	-Ensure material used for levee maintenance is noncontaminated	water quality	
	-Manage discharges from abandoned mines	water quality	
	-Remediate abandoned mining sites discharging pollutants	water quality	
	-Maintain and stabilize existing levees	water quality	
	-Implement uniform maintenance standards	provisional	
	-Provide funding for maintenance and stabilization	provisional	
	-Relocate levees to more stable sites	habitat	
	-Widen floodways to increase flood conveyance	habitat	
	-Establish and manage flood overflow areas	habitat	
	-Maintain/reconstruct levees around infrastructure	habitat	
	-Reconstruct infrastructure to increase reliability	habitat	
	-Relocate/reroute infrastructure	habitat	
	Establishment of Long-Term Funding Mechanisms	provisional	

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